

REMARKS

Summary of the Office Action

Claim 16 is withdrawn from consideration as being directed to a non-elected invention.

Claims 10, 3-5, 12 and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yoneta et al. (U.S. Patent Application Publication No. 2003/0034496) (hereinafter "Yoneta") in view of Minami et al. (U.S. Patent Application Publication No. 2002/0176158) (hereinafter "Minami"), Homme et al. (U.S. Patent Application Publication No. 2003/0001101) (hereinafter "Homme"), and Yoshida et al. (U.S. Patent No. 5,386,122) (hereinafter "Yoshida").

Claim 2 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Yoneta as modified by Minami, Homme, and Yoshida, as applied to claim 10 above, and further in view of Allison (U.S. Patent No. 3,748,546) (hereinafter "Allison").

Summary of the Response to the Office Action

Applicants have canceled withdrawn claim 16 without prejudice or disclaimer. Accordingly, claims 2-5, 10, 12, and 14 are currently pending for consideration.

Rejections under 35 U.S.C. § 103(a)

Claims 10, 3-5, 12 and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yoneta in view of Minami, Homme, and Yoshida. Claim 2 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Yoneta as modified by Minami, Homme, and Yoshida, as applied to claim 10 above, and further in view of Allison. These rejections are respectfully traversed for at least the following reasons.

The Office Action concedes at pages 3-4 that Yoneta does not disclose that a “resin film is provided so as to cover at least regions corresponding to regions where the photodiodes are formed on a side of the incident surface of the light to be detected.” The Office Action states in this regard that Yoneta “discloses forming an antireflective film on an entire side of the incident surface of light to be detected which overlaps photodiodes formed on the opposite side of the substrate ([0039]) but does not disclose forming a resin film.” The Office Action then asserts, at page 4, that Minami cures this deficiency of Yoneta by disclosing “forming a resin film so as to protect an underlying antireflective material on a substrate ([0044] – [0045]).” The Office Action goes on to assert that “it would have been obvious ... to modify Yoneta with forming a 1-50 micro thick resin film on an incident surface of light to be detected so as to protect an underlying anti-reflective coating.”

Applicants respectfully traverse this combination rejection at least because Minami is clearly directed to an entirely different and non-analogous technical art field as compared to the technical art field of the instant application’s disclosed invention. In this regard, Applicants respectfully submit that Minami discloses an optical element for use with an optical window for an infrared imaging camera which includes an infrared transparent substrate, an antireflection film formed on the infrared transparent substrate, and a protective film formed on the antireflection film. Applicants respectfully submit that in the arrangement disclosed in Minami the infrared transparent substrate is made of a single crystalline silicon. However, Applicants respectfully submit that Minami does not, to any extent, discuss the use of it’s disclosed features with a photodiode array. Applicants respectfully submit that the photodiode array arrangement

and technical field of the instant application is particularly different from the infrared transparent substrate arrangement and technical field of Minami.

Even further, Applicants respectfully submit that Minami makes no teaching or suggestion that its disclosed features could be applicable in a photodiode array and radiation detector arrangement. Applicants respectfully submit that one having ordinary skill in the subject art would not be provided with a reasonable prospect of success from the disclosure of Minami to be led to apply the protective film utilized in the optical window to the resin film for preventing damage on the regions corresponding to the photodiodes during mounting.

Even further, Applicants respectfully submit that Minami does not teach, or even suggest, that the regions allegedly corresponding to the photodiodes suffer physical damage during mounting. For this reason, Applicants respectfully submit that a person having ordinary skill in the subject art would not be provided with any motivation from either of the applied references to combine Minami and Yoneta in order to prevent damage at the regions allegedly corresponding to the photodiodes during mounting.

In this regard, MPEP § 2141.01(a) cites to KSR Int'l Co. v. Teleflex, Inc., 127 S. Ct. at 1727, 1741 (2007) (hereinafter "KSR") for the proposition that "any need or problem known in the field of endeavor at the time of the invention and addressed by the patent [or application at issue] can provide a reason for combining the elements in the manner claimed (emphasis added)." The subject matter of Yoneta, like the claims of the present application, are directed to an arrangement including a photodiode array. On the other hand, the applied secondary reference to Minami is directed to an optical element for use with an optical window of an infrared imaging camera, as discussed previously. Applicants respectfully submit that the optical

element for use with an optical window of an infrared imaging camera arrangement of Minami is not in the same field of endeavor as a radiation detector including a photodiode array. As would be appreciated by one having ordinary skill in either of these arts, such arrangements have drastically different functionalities, structure, designs, components and parts. Because of the differences between such respective arrangements, one skilled in either of these arts would not look to an optical element for use with an optical window of an infrared imaging camera arrangement when evaluating features to be used in a radiation detector including a photodiode array. Moreover, as discussed previously, Minami does not teach, or even suggest, that it's disclosed arrangement could be used to modify a radiation detector including a photodiode array.

According to In re Clay, 966 F. 2d 656, 658-659 (Fed. Cir. 1992), in making a determination of whether art is analogous to an invention, two criteria must be considered. First, a determination must be made as to whether the prior art is from the same field of endeavor, regardless of the problem addressed. Secondly, even if the prior art is not in the same field of endeavor, a determination must be made of whether the reference is still reasonably pertinent to the particular problem with which the inventor is involved.

As to the first of these determinations, this first prong of the In re Clay test is not met because both Yoneta and Minami are clearly directed to different fields of endeavor, for at least the foregoing reasons. In addition, as to the second of these determinations, even assuming, strictly arguendo, that these two prior art references might somehow be deemed to be in the same general field of endeavor for some reason, neither of these references are reasonably pertinent to the particular problem with which the inventors of the instant application were involved within any such purported general field.

More particularly, as discussed previously, the inventors of the instant application were particularly concerned with preventing physical damage on photodetecting regions during a mounting process. Thus, it is clear that the second prong of the In re Clay test is also not satisfied at least because neither of the applied Yoneta and Minami references are reasonably pertinent to any extent to the particular problem with which the inventors of the instant application were involved. In other words, Applicants respectfully submit that there is no discussion in either of these references of preventing physical damage of the regions allegedly corresponding to the photodiodes during mounting.

Accordingly, Applicants respectfully submit that one skilled in either of these arts would not have looked to combine Yoneta and Minami to address the problems confronting the inventors of the instant application. Also, Applicants respectfully submit that one skilled in either of these arts would not have found it obvious to consider unrelated/nonanalogous technology of an optical element for use with an optical window of an infrared imaging camera as taught by Minami pertinent to the concerns in the design of a radiation detector including a photodiode array, absent knowledge of the invention, viewed in hindsight. Applicants respectfully submit that the Examiner is using knowledge of the invention, in hindsight, to reach a finding of obviousness. However, it is well settled that such a “hindsight reconstruction” is impermissible. See, e.g., W.L. Gore & Assoc. v. Garlock, Inc., 721 F.2d 1540, 1550, 220 USPQ 303, 311 (Fed. Cir. 1983).

Even further, in the present application, the combination of features described in independent claim 10 explain that the scintillator panel is arranged so as to face to the light incident surface of the photodiode array (semiconductor substrate). It appears to Applicants,

after studying the Office Action in detail, that the Examiner has a technical misunderstanding regarding the scintillator panel as described in independent claim 10 of the instant application in this regard.

Finally, it also appears to Applicants, after studying the Office Action in detail, that the Examiner has a technical misunderstanding regarding the applied secondary reference to Allison. In this regard, Applicants respectfully submit that in Allison, the disclosed holes 37 are formed on the light incident surface side of the photosensitive array. Applicants respectfully submit that the holes 37 are not formed on the opposite surface side to the light incident surface.

Accordingly, Applicants respectfully assert that the rejections under 35 U.S.C. § 103(a) should be withdrawn because Applicants traverse the combination of these references and also because the applied art of record, whether taken separately or combined, do not teach or suggest at least the features of independent claim 10 of the instant application as discussed previously. As pointed out by MPEP § 2143.03, “[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art.’ In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).”

The dependent claims are in condition for allowance for at least the same reasons as their respective base claim independent claim 10, and the reasons discussed previously.

Withdrawn independent claim 16 has been canceled without prejudice or disclaimer.

CONCLUSION

In view of the foregoing, Applicants respectfully submit that the pending claims are in condition for allowance, and respectfully request reconsideration and timely allowance of the

pending claims. It is clear from a review of the prosecution of this application to date that Applicants have made significant efforts, through, for example filing a Request for Continued Examination and conducting an Examiner interview in this application, to advance the prosecution of this application. As a result, in the event that the Examiner might feel that there are any issues outstanding after consideration of this response, the Examiner is respectfully requested invited to contact Applicants' undersigned representative at the telephone number provided below to expedite prosecution. A favorable action is awaited.

EXCEPT for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. § 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 50-0573. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

DRINKER BIDDLE & REATH LLP



Paul A. Fournier
Reg. No. 41,023

Dated: April 29, 2009

By:

Customer No. 055694
Drinker Biddle & Reath LLP
1500 K Street, N.W., Suite 1100
Washington, DC 20005-1209
Tel.: (202) 842-8800
Fax: (202) 842-8465